

ABSTRACT OF THE DISCLOSURE

A semiconductor device and a manufacturing method thereof are provided for the improvement of the reliability of copper damascene wiring in which a film between wiring layers and a
5 film between via layers are comprised of an SiOC film with low dielectric constant. A film between wiring layers, a film between wiring layers, and a film between via layers are respectively comprised of an SiOC film, and stopper insulating films and a cap insulating film are comprised of a laminated
10 film of an SiCN film A and an SiC film B. By doing so, it becomes possible to reduce the leakage current of the film between wiring layers, the film between wiring layers, and the film between via layers, and also possible to improve the adhesion of the film between wiring layers, the film between
15 wiring layers, and the film between via layers to the stopper insulating films and the cap insulating film.